# Springfield, VA. 22150 Per Telecon NRL 9/19/94

# AD-A284 543

# System Quality Consultants, Inc.

N00014-94-C-2063

# TECHNICAL STATUS REPORT FOR THE PERIOD ENDING 31 July 94

# **Executive Summary**

During this month's reporting period, SQC continued to provide project management to the Backgrounds Data Center (BDC). In addition to the Project Manager, SQC provided management of the Software Development, Project Support, and Specification and Test efforts. The most significant events that occurred are the completion of coding and unit test of the Final Operational Capability (FOC) Software, the continuation of MSX Data System Test (DST) 4.2, and the start of DST 5.1.

# Task 1--Project Management Support

#### **Abstract**

This task requires SQC to provide risk management analysis, software cost estimates, procurement strategies, program office organization and staff planning, schedule and resource allocation planning, program planning and documentation, project control system accounting and training.

# Work Performed During JUL 94

Provided Specification & Test (S&T), Software Development, and Project Support Office input to MSX project GANTT and PERT charts for scheduling and resource allocation planning.

Provided S&T, Software Development, and Project Support Office input to the monthly MSX and Core status reports.

Successfully managed the move from building 209 to A59.

# **Anticipated Activities During AUG 94**

Continue the production of GANTT schedules and PERT charts.

Continue to provide input for FY95 budget, project planning, and monthly status reports.

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Systen Quality Consultants, Inc., 5551 Loisdale Ct.

# Task 2--Management Plan Development

#### **Abstract**

This task requires SQC to develop and present program management plans, software development plans, configuration management plans, quality assurance plans, test plans, and independent verification and validation plans for use on Naval Research Laboratory's (NRL) programs.

#### **Work Performed During JUL 94**

Chaired nine Configuration Control Boards (CCB) which processed seventy three (73) Problem Report/Change Request (PR/CR) actions. This included: fourteen new PR/CRs, twenty-nine analyzes, sixteen implementations, four validations, four QE's, and six closures.

Continued to manage the ongoing effort of producing a BDC User's Guide. Two additional sections to the user's guide were completed this reporting period.

Completed design of the PMG application.

Completed the coding and unit testing of the software for FOC. Fifty-six (56) DCRs were filed in July for FOC. Forty-nine (49) DCRs were analyzed for FOC, and forty (40) were implemented. Thirty-one (31) DCRs for FOC were closed in July.

Implemented software modifications required by the PR/CR process resulting from DST 4.2. Sixteen (16) PR/CRs were analyzed during July. Five (5) PR/CR implementations were completed.

Began integration testing of FOC software.

Continued to manage VISTA software development.

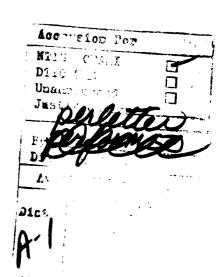
Continued to manage RAIDS software development.

# **Anticipated Activities During AUG 94**

Chair CCBs as required.

Produce the first draft of the BDC User's Guide.

Review final draft of proposed update to the BDC CMP.



Complete integration testing of FOC Software and deliver it for formal testing.

Continue to manage VISTA software development.

Continue to manage RAIDS software development.

# **Task 3--Detailed Process Development**

#### Abstract

This task requires SQC to develop and present processes (process flow diagrams, step-by-step procedures, quality assurance procedures, and quality checklists) to be used on NRL programs.

# Work Performed During JUL 94

None.

# **Anticipated Activities During AUG 94**

Review updated draft PFD for the Configuration Item Receipts.

Initiate development of detailed step-by-step procedures for the Configuration Item Receipt procedure.

# **Task 4--Requirements Development**

#### Abstract

This task requires SQC to meet with NRL scientists, users, customers, and others identified by the Contracting Officer's Technical Representative to document project requirements. SQC is required to document requirements in Type A and Type B specifications. The requirements are to provide program managers with capability for product assessment through analysis and testing of performance parameters. SQC is to determine performance requirements and demonstrate satisfaction through testing.

#### Work Performed During JUL 94

Released the BDC to MDDC ICD from OCM as a requirements document.

# **Anticipated Activities During AUG 94**

Circulate the next revisions of the BDC to SDAC and BDC to PLDAF ICDs for review.

Revise Buc to EMDAC and BDC to OSDP ICDs and circulate them for review.

Incorporate the review comments received verbally from the PLDAF into a new revision of the BDC to PLDAF ICD and circulate it for review.

#### Task 5-- Documentation Review

#### Abstract

This task requires SQC to review extenents prepared by NRL contractors in a variety of activities for compliance with relevant established standards, development plans, and management plans and to provide comments and recommendations to NRL. The task also requires SQC to perform technical reviews and audits (formal design reviews, informal reviews, and administrative reviews) on NRL's contractor developed hardware, software, facilities, and management documents.

# **Work Performed During JUL 94**

Performed final review of the BDC Electronic Network Submission Procedure.

# **Anticipated Activities During AUG 94**

Review update of the BDC Lexicon.

#### Task 6--Technical Information Preparation and Presentation

#### **Abstract**

This task requires SQC to prepare and provide formal and informal state-of-the-art techniques presentations in Project and Process Management disciplines.

#### Work Performed During JUL 94

Updated a briefing on BDC Configuration Management.

Prepared and distributed CCB Minutes.

Prepared and distributed DM PR Status Reports.

Met with and held technical discussions with representatives from the RAIDS Program.

Participated in DST 5.1 Planning Teleconference.

Pursued actions required to complete two action items received at the MSX Data Management TIM and managed the effort to successfully complete them.

# **Anticipated Activities During AUG 94**

Present a briefing on BDC Configuration Management.

Meet with and hold technical discussions with representatives from the RAIDS Program.

Participate in DST 4.3 & 4.4 Planning Teleconference.

# Task 7--Formal Test Case and Test Procedure Development and Execution

#### **Abstract**

This task requires SQC to develop and execute detailed test cases and procedures designed to validate designated developed products prior to their being declared operational. The testing must demonstrate that all system elements satisfy NRL requirements. SQC must also verify that testing spans the overall acquisition cycle.

# **Work Performed During JUL 94**

Managed and provided guidance for the preparation of formal test cases, test casedescriptions, and test procedures. During this reporting period, test procedures were developed to test the software allocated functions of the MSX Pipeline System.

Continued the management of and coordinated the activities necessary to successfully complete Data System Tests (DST) 3.6 and DST 4.2. Acted as the central repository for problem reporting and resolution, both internally at the BDC and externally between the other participating MSX data organizations. (4.7, 4.7.2).

Began execution of DST 5.1

# **Anticipated Activities During AUG 94**

Manage and coordinate the activities required to conclude DST 5.1.

Plan, prepare for, and execute DSTs 4.3, 4.4, 5.2, and 3.5.

Release MSX Program test documentation from OCM and initiate FOC test activities.